Project Management

ALL-IN-ONE

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7

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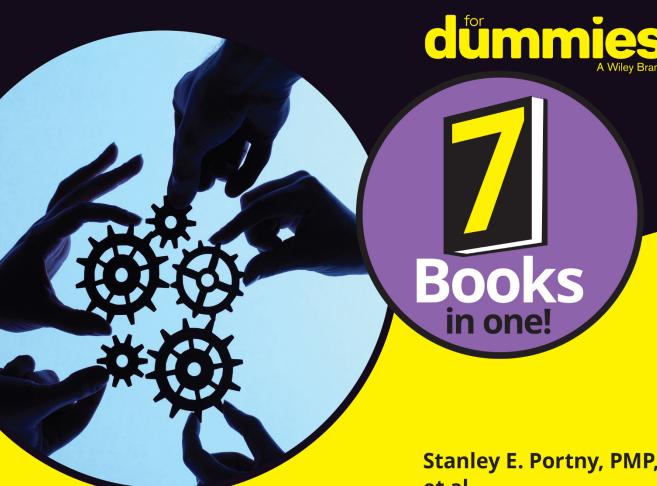**in one!**

Stanley E. Portny, PMP, et al.

Project Management

ALL-IN-ONE

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Project Management All-in-One For Dummies®

Contents at a Glance

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Introduction

No matter where you work or what you do, chances are you need to start, plan, execute, monitor, and complete projects smoothly. *Project Management All-in-One For Dummies* is your guide to effectively developing and using the skills you need.

About This Book

Project Management All-in-One For Dummies helps you acquire and cultivate some of the most important attributes needed for carrying out successful projects. Here, you get pointers on starting, planning, controlling, and finishing projects; using checklists and software to help you work; trying popular new project management methods like agile and scrum; and preparing for Project Management Professional (PMP) certification.

A quick note: Sidebars (shaded boxes of text) dig into the details of a given topic, but they aren't crucial to understanding it. Feel free to read them or skip them. You can pass over the text accompanied by the Technical Stuff icon, too. The text marked with this icon gives some interesting but nonessential information about increasing influence.

One last thing: Within this book, you may note that some web addresses break across two lines of text. If you're reading this book in print and want to visit one of these web pages, simply key in the web address exactly as it's noted in the text, pretending as though the line break doesn't exist. If you're reading this as an e-book, you've got it easy — just click the web address to be taken directly to the web page.

Foolish Assumptions

Here are some assumptions about you, dear reader, and why you're picking up this book:

» You're an experienced project manager who wants to take your skills to new heights.

» You're new to project management and you've never been on a project team, but you're eager to find out more.

» You're interested in finding out about different tools you can use to manage projects.

» You're curious about different types of project management methods, such as agile, scrum, and enterprise agility.

» You want to brush up on some basics as you prepare for the PMP exam.

Icons Used in This Book

Like all *For Dummies* books, this book features icons to help you navigate the information. Here's what they mean.

If you take away anything from this book, it should be the information marked with this icon.

This icon flags information that digs a little deeper than usual into a particular topic.

This icon highlights especially helpful advice about developing and using project management skills.

This icon points out situations and actions to avoid in your role as a project manager.

Beyond the Book

In addition to the material in the print or e-book you're reading right now, this product comes with some access-anywhere goodies on the web. Check out the free Cheat Sheet for info on the phases of a project life cycle, project management processes, and a project manager's basic tasks. To get this Cheat Sheet, simply go to `www.dummies.com` and search for "*Project Management All-in-One For Dummies* Cheat Sheet" in the Search box.

Where to Go from Here

You don't have to read this book from cover to cover, but if you're an especially thorough person (and you probably are if you're a project manager!), go right ahead. If you just want to find specific information and then get back to your projects, take a look at the table of contents or the index, and then dive into the chapter or section that interests you.

For example, if you want the basics on starting, planning, and managing a project, flip to Books 1 and 2. If you want to build your scrum skills, check out Book 5. Or if you're considering earning your PMP certification, Book 7 is the place to be.

No matter where you start, you'll find the information you need to more effectively manage your work projects. Good luck!

1

In the Beginning: Project Management Basics

Contents at a Glance

Chapter **1**

Achieving Results with Project Management

S uccessful organizations create projects that produce desired results in established time frames with assigned resources. As a result, businesses are increasingly driven to find individuals who can excel in this project-oriented environment.

Because you're reading this book, chances are good that you've been asked to manage a project. So, hang on tight — you're going to need a new set of skills and techniques to steer that project to successful completion. But not to worry! This chapter gets you off to a smooth start by showing you what projects and project management really are and by helping you separate projects from non-project assignments. This chapter also offers the rationale for why projects succeed or fail and gets you into the project-management mindset.

Determining What Makes a Project a Project

No matter what your job is, you handle a myriad of assignments every day. For example, you may prepare a memo, hold a meeting, design a sales campaign, or move to new offices. Or you may make the information systems more

user-friendly, develop a research compound in the laboratory, or improve the organization's public image. Not all these assignments are projects. How can you tell which ones are and which ones aren't? This section is here to help.

People often confuse the following two terms with *project:*

>> **Process:** A *process* is a series of routine steps to perform a particular function, such as a procurement process or a budget process. A process isn't a one-time activity that achieves a specific result; instead, it defines *how* a particular function is to be done every time. Processes, like the activities that go into buying materials, are often parts of projects.

>> **Program:** This term can describe two different situations:

- First, a *program* can be a set of goals that gives rise to specific projects, but, unlike a project, a program can never be completely accomplished. For example, a health-awareness program can never completely achieve its goal (the public will never be totally aware of all health issues as a result of a health-awareness program), but one or more projects may accomplish specific results related to the program's goal (such as a workshop on minimizing the risk of heart disease).

- Second, a *program* sometimes refers to a group of specified projects that achieve a common goal.

Understanding the three main components that define a project

A *project* is a temporary undertaking performed to produce a unique product, service, or result. Large or small, a project always has the following three components:

>> **Specific scope:** Desired results or products.

>> **Schedule:** Established dates when project work starts and ends. (See Chapter 1 in Book 2 for how to develop responsive and feasible project schedules.)

>> **Required resources:** Necessary number of people and funds and other resources.

As illustrated in Figure 1-1, each component affects the other two. For example: Expanding the type and characteristics of desired outcomes may require more time (a later end date) or more resources. Moving up the end date may necessitate paring down the results or increasing project expenditures (for instance, by paying overtime to project staff). Within this three-part project definition, you perform work to achieve your desired results.

FIGURE 1-1:
The relationship
between the
three main
components of a
project.

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REMEMBER

Although many other considerations may affect a project's performance (see the later section "Defining Project Management" for details), these three components are the basis of a project's definition for the following three reasons:

>> The only reason a project exists is to produce the results specified in its scope.

>> The project's end date is an essential part of defining what constitutes successful performance; the desired result must be provided by a certain time to meet its intended need.

>> The availability of resources shapes the nature of the products the project can produce.

A Guide to the Project Management Body of Knowledge, 6th Edition *(PMBOK 6)*, elaborates on these components by

>> Emphasizing that *product* includes both the basic nature of what is to be produced (for example, a new training program or a new prescription drug) and its required characteristics (for example, the topics that the training program must address), which are defined as the product's *quality*

>> Noting that *resources* refers to funds, as well as to other, nonmonetary resources, such as people, equipment, raw materials, and facilities

PMBOK 6 also emphasizes that *risk* (the likelihood that not everything will go exactly according to plan) plays an important role in defining a project and that guiding a project to success involves continually managing tradeoffs among the three main project components — the products to be produced and their characteristics, the schedule, and the resources required to do the project work.

Recognizing the diversity of projects

Projects come in a wide assortment of shapes and sizes. For example, projects can

>> **Be large or small**

- Installing a new subway system, which may cost more than $1 billion and take 10 to 15 years to complete, is a project.

- Preparing an ad hoc report of monthly sales figures, which may take you one day to complete, is also a project.

>> **Involve many people or just you**

- Training all 10,000 of your organization's staff in a new affirmative-action policy is a project.

- Rearranging the furniture and equipment in your office is also a project.

>> **Be defined by a legal contract or by an informal agreement**

- A signed contract between you and a customer that requires you to build a house defines a project.

- An informal promise you make to install a new software package on your colleague's computer also defines a project.

>> **Be business-related or personal**

- Conducting your organization's annual blood drive is a project.

- Having a dinner party for 15 people is also a project.

REMEMBER No matter what the individual characteristics of your project are, you define it by the same three components described in the previous section: results (or scope), start and end dates, and resources. The information you need to plan and manage your project is the same for any project you manage, although the ease and the time to develop it may differ. The more thoroughly you plan and manage your projects, the more likely you are to succeed.

Describing the four phases of a project life cycle

REMEMBER A project's *life cycle* is the series of phases that the project passes through as it goes from its start to its completion. A *phase* is a collection of logically related project activities that culminates in the completion of one or more project deliverables (see Chapter 3 in Book 1 for more on project deliverables). Every project, whether large or small, passes through the following four life-cycle phases:

>> **Starting the project:** This phase involves generating, evaluating, and framing the business need for the project and the general approach to performing it and agreeing to prepare a detailed project plan. Outputs from this phase may include approval to proceed to the next phase, documentation of the need for the project and rough estimates of time and resources to perform it (often included in a project charter), and an initial list of people who may be interested in, involved with, or affected by the project.

>> **Organizing and preparing:** This phase involves developing a plan that specifies the desired results; the work to do; the time, cost, and other resources required; and a plan for how to address key project risks. Outputs from this phase may include a project plan that documents the intended project results and the time, resources, and supporting processes needed to create them.

>> **Carrying out the work:** This phase involves establishing the project team and the project support systems, performing the planned work, and monitoring and controlling performance to ensure adherence to the current plan. Outputs from this phase may include project results, project progress reports, and other communications.

>> **Closing the project:** This phase involves assessing the project results, obtaining customer approvals, transitioning project team members to new assignments, closing financial accounts, and conducting a post-project evaluation. Outputs from this phase may include final, accepted, and approved project results and recommendations and suggestions for applying lessons learned from this project to similar efforts in the future.

For small projects, this entire life cycle can take just a few days. For larger projects, it can take many years! In fact, to allow for greater focus on key aspects and to make it easier to monitor and control the work, project managers often subdivide larger projects into separate phases, each of which is treated as a mini-project and passes through these four life-cycle phases. No matter how simple or complex the project is, however, these four phases are the same.

REMEMBER

In a perfect world, you complete one phase of your project's life cycle before you move on to the next one, and after you complete that phase, you never return to it again. But the world isn't perfect, and project success often requires a flexible approach that responds to real situations that you may face, such as the following:

>> **You may have to work on two (or more) project phases at the same time to meet tight deadlines.** Working on the next phase before you complete the current one increases the risk that you may have to redo tasks, which may cause you to miss deadlines and spend more resources than you originally planned. If you choose this strategy, be sure people understand the potential risks and costs associated with it.

>> **Sometimes you learn by doing.** Despite doing your best to assess feasibility and develop detailed plans, you may realize you can't achieve what you thought you could. When this situation happens, you need to return to the earlier project phases and rethink them in light of the new information you've acquired.

>> **Sometimes things change unexpectedly.** Your initial feasibility and benefits assessments are sound, and your plan is detailed and realistic. However, certain key project team members leave the organization without warning during the project. Or a new technology emerges, and it's more appropriate to use than the one in your original plans. Because ignoring these occurrences may seriously jeopardize your project's success, you need to return to the earlier project phases and rethink them in light of these new realities.

Defining Project Management

Project management is the process of guiding a project from its beginning through its performance to its closure. Project management includes five sets of processes, which is described in more detail in the following sections:

>> **Initiating processes:** Clarifying the business need, defining high-level expectations and resource budgets, and beginning to identify audiences that may play a role in your project

>> **Planning processes:** Detailing the project scope, time frames, resources, and risks, as well as intended approaches to project communications, quality, and management of external purchases of goods and services

>> **Executing processes:** Establishing and managing the project team, communicating with and managing project audiences, and implementing the project plans

>> **Monitoring and controlling processes:** Tracking performance and taking actions necessary to help ensure project plans are successfully implemented and the desired results are achieved

>> **Closing processes:** Ending all project activity

As illustrated in Figure 1-2, these five process groups help support the project through the four phases of its life cycle. Initiating processes support the work to be done when starting the project, and planning processes support the organizing and preparing phase. Executing processes guide the project tasks performed when carrying out the work, and closing processes are used to perform the tasks that bring the project to an end.